

SPCS 1762
PATENT

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) ~~A vapor deposition~~ An apparatus for coating an item, said apparatus having a cleanroom side that is accessible from inside a cleanroom and a service side that is not accessible from inside the cleanroom, said apparatus comprising

a vaporizer for vaporizing solid coating material,

a pyrolysis furnace for heating the vaporized coating material to form a pyrolyzed gaseous coating material, and

a deposition enclosure defining a deposition chamber for receiving an item to be coated, said deposition enclosure having an inlet for flow of pyrolyzed gaseous coating material from a source outside the deposition chamber into the deposition chamber, an outlet for flow of pyrolyzed gaseous coating material from the deposition chamber, an access door for accessing the deposition chamber from the cleanroom side of the apparatus, and a service door for accessing the deposition chamber from the service side of the apparatus.

2. (Original) The apparatus set forth in claim 1 further comprising a filter connected to said outlet for receiving gaseous coating material discharged from the deposition chamber, said filter being accessible from the service side of the apparatus.

SPCS 1762
PATENT

3. (Currently amended) The apparatus set forth in claim 1 wherein said vaporizer, pyrolysis furnace, and service door are on the service side of the apparatus and wherein said apparatus is accessible from inside the cleanroom through an opening in a wall of the cleanroom, said apparatus further comprising a shroud distinct from said cleanroom wall at least partially surrounding the access door to isolate the access door from the service side of said apparatus and to allow isolated access to the access door and deposition chamber from inside the cleanroom.

Claims 4 - 5. (Cancelled)

6. (Currently amended) The apparatus set forth in claim [[5]] 3 wherein said shroud comprises a platform for supporting said items outside of the deposition enclosure.

7. (Original) The apparatus set forth in claim 1 further comprising a control mechanism comprising at least two local control stations for controlling operation of the apparatus.

8. (Original) The apparatus set forth in claim 7 wherein said at least two local control stations comprise a first local control station accessible from outside of the cleanroom and a second local control station accessible from within the cleanroom.

9. (Original) The apparatus set forth in claim 7 wherein said control mechanism comprises an indicator for displaying a status of the apparatus, said indicator being visible from inside the cleanroom.

SPCS 1762
PATENT

10. (Currently amended) A deposition enclosure for use in a vapor deposition an apparatus having a cleanroom side and a service side, said deposition enclosure comprising

a structure defining a deposition chamber for receiving an item to be coated,

an inlet for flow of coating material from a source outside the deposition chamber into the deposition chamber,

an outlet for flow of coating material out of the deposition chamber,

at least two doors attached to said structure to allow access to said deposition chamber, at least one of said doors allowing access to the deposition chamber from the cleanroom side of the apparatus for placement of an item to be coated in the deposition chamber and for removal of a coated item from the deposition chamber.

11. (Original) The deposition enclosure set forth in claim 10 wherein said at least two doors comprise an access door and a service door, said access door being configured to allow access to the deposition chamber from inside a cleanroom and said service door being configured to allow access to the deposition chamber from outside the cleanroom.

12. (Currently amended) The deposition enclosure set forth in claim 11 wherein said apparatus is accessible from inside the cleanroom through an opening in a wall of the cleanroom, said enclosure further comprising a shroud distinct from said cleanroom wall at least partially surrounding said access door to isolate the access door from the service side of said

SPCS 1762
PATENT

apparatus and to allow isolated access to the access door and deposition chamber from inside the cleanroom.

13. (Original) The deposition enclosure set forth in claim 11 wherein said service door is connected to said structure on the service side of the apparatus.

14. (Original) The deposition enclosure set forth in claim 11 wherein said access door is connected to said structure on the cleanroom side of the apparatus.

15. (Original) The deposition enclosure set forth in claim 11 wherein said access door and said service door are attached to said structure by hinges.

16. (Original) The deposition enclosure set forth in claim 11 wherein said access door comprises a window for viewing the deposition chamber from inside the cleanroom.

17. (Original) The deposition enclosure set forth in claim 11 wherein said service door comprises a window for viewing the deposition chamber from outside the cleanroom.

Claims 18 - 22. (Cancelled)

23. (Currently amended) ~~A vapor deposition~~ An apparatus for coating an item, said apparatus being adapted to be positioned outside of a cleanroom and being accessible from inside the cleanroom through an opening in a cleanroom wall, said apparatus comprising

a vaporizer for vaporizing solid coating material,

SPCS 1762
PATENT

a pyrolysis furnace for heating the vaporized coating material to form a pyrolyzed gaseous coating material,

a deposition enclosure defining a deposition chamber for receiving an item to be coated, said deposition enclosure having an inlet for flow of pyrolyzed gaseous coating material into the deposition chamber, an outlet for flow of pyrolyzed gaseous coating material from the deposition chamber, and at least two doors for accessing the deposition chamber, and

a shroud distinct from said cleanroom wall at least partially surrounding one but not both of said at least two doors to allow isolated access to said one door and the deposition chamber from inside the cleanroom.

24. (Original) The apparatus set forth in claim 23 wherein said shroud is at least partially transparent to allow viewing of the apparatus from within the cleanroom.

25. (Original) The apparatus set forth in claim 23 wherein said shroud comprises a first upper part and a second upper part comprising a transparent material to allow viewing of the apparatus from within the cleanroom.

26. (Original) The apparatus set forth in claim 25 wherein said transparent material comprises polycarbonate.

27. (Original) The apparatus as set forth in claim 25 wherein said shroud comprises a lower part having a platform for supporting said items outside the deposition enclosure.

SPCS 1762
PATENT

28. (Original) The apparatus set forth in claim 27 wherein said lower part comprises a fastening flange adapted for connection to said first and second upper parts.

29. (Original) The apparatus set forth in claim 23 wherein said shroud comprises a wall having an opening for receiving the deposition enclosure.

30. (Original) The apparatus set forth in claim 23 wherein said at least two doors comprise an access door and a service door, said access door being configured to allow access to the deposition chamber from inside the cleanroom and said service door being configured to allow access to the deposition chamber from outside of the cleanroom.

31. (New) The deposition enclosure set forth in claim 12 wherein said shroud completely surrounds said access door.

32. (New) The apparatus set forth in claim 23 wherein said shroud completely surrounds said access door.

33. (New) The apparatus set forth in claim 1 wherein said solid coating material is a polymer, and wherein said deposition chamber is a chamber where said solid coating material polymerizes on said item to form a polymer coating.

34. (New) The deposition enclosure set forth in claim 10 wherein said coating material is a polymer, and wherein said deposition chamber is a chamber where said coating material polymerizes on said item to form a polymer coating.

SPCS 1762
PATENT

35. (New) The apparatus set forth in claim 23 wherein said solid coating material is a polymer, and wherein said deposition chamber is a chamber where said solid coating material polymerizes on said item to form a polymer coating.